

FORM PTO-1390 (Modified)
(REV 11-98)

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

ATTORNEY'S DOCKET NUMBER

TRANSMITTAL LETTER TO THE UNITED STATES

112740-312

DESIGNATED/ELECTED OFFICE (DO/EO/US)

U.S. APPLICATION NO. (IF KNOWN, SEE 37 CFR

CONCERNING A FILING UNDER 35 U.S.C. 371

09/937233

INTERNATIONAL APPLICATION NO.

PCT/DE00/00611

INTERNATIONAL FILING DATE

1 March 2000

PRIORITY DATE CLAIMED

23 March 1999

TITLE OF INVENTION

METHOD AND APPARATUS FOR ELECTRONICALLY PROCESSING PURCHASING AND SALES
TRANSACTIONS

APPLICANT(S) FOR DO/EO/US

Christian Rappel

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.
3. ☒ This is an express request to begin national examination procedures (35 U.S.C. 371(f)) at any time rather than delay examination until the expiration of the applicable time limit set in 35 U.S.C. 371(b) and PCT Articles 22 and 39(1).
4. ☒ A proper Demand for International Preliminary Examination was made by the 19th month from the earliest claimed priority date.
5. ☒ A copy of the International Application as filed (35 U.S.C. 371 (c) (2))
 - a. ☒ is transmitted herewith (required only if not transmitted by the International Bureau).
 - b. ☐ has been transmitted by the International Bureau.
 - c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☒ A translation of the International Application into English (35 U.S.C. 371(c)(2)).
7. ☐ A copy of the International Search Report (PCT/ISA/210).
8. ☒ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371 (c)(3))
 - a. ☐ are transmitted herewith (required only if not transmitted by the International Bureau).
 - b. ☐ have been transmitted by the International Bureau.
 - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
 - d. ☒ have not been made and will not be made.
9. ☐ A translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
10. ☐ An oath or declaration of the inventor(s) (35 U.S.C. 371 (c)(4)).
11. ☐ A copy of the International Preliminary Examination Report (PCT/IPEA/409).
12. ☐ A translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371 (c)(5)).

Items 13 to 20 below concern document(s) or information included:

13. ☒ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
14. ☐ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
15. ☒ A **FIRST** preliminary amendment.
16. ☐ A **SECOND** or **SUBSEQUENT** preliminary amendment.
17. ☒ A substitute specification.
18. ☐ A change of power of attorney and/or address letter.
19. ☒ Certificate of Mailing by Express Mail
20. ☒ Other items or information:

Submission of Drawings - Figure 1 on one sheet

U.S. APPLICATION NO. (IF KNOWN, SEE 37 CFR) <div style="font-size: 24pt; font-weight: bold;">09/937233</div>		INTERNATIONAL APPLICATION NO. PCT/DE00/00611		ATTORNEY'S DOCKET NUMBER 112740-312	
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21. The following fees are submitted: BASIC NATIONAL FEE (37 CFR 1.492 (a) (1) - (5)) :				CALCULATIONS PTO USE ONLY	
<input type="checkbox"/> Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO and International Search Report not prepared by the EPO or JPO \$1,000.00 <input checked="" type="checkbox"/> International preliminary examination fee (37 CFR 1.482) not paid to USPTO but International Search Report prepared by the EPO or JPO \$860.00 <input type="checkbox"/> International preliminary examination fee (37 CFR 1.482) not paid to USPTO but international search fee (37 CFR 1.445(a)(2)) paid to USPTO \$710.00 <input type="checkbox"/> International preliminary examination fee paid to USPTO (37 CFR 1.482) but all claims did not satisfy provisions of PCT Article 33(1)-(4) \$690.00 <input type="checkbox"/> International preliminary examination fee paid to USPTO (37 CFR 1.482) and all claims satisfied provisions of PCT Article 33(1)-(4) \$100.00				<div style="border: 1px solid black; padding: 5px; width: 100%;"> ENTER APPROPRIATE BASIC FEE AMOUNT = \$860.00 </div>	
Surcharge of \$130.00 for furnishing the oath or declaration later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492 (e)).				<div style="border: 1px solid black; padding: 5px; width: 100%;"> \$0.00 </div>	
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE		
Total claims	8 - 20 =	0	x \$18.00	\$0.00	
Independent claims	2 - 3 =	0	x \$80.00	\$0.00	
Multiple Dependent Claims (check if applicable).				\$0.00	
TOTAL OF ABOVE CALCULATIONS =				\$860.00	
Reduction of 1/2 for filing by small entity, if applicable. Verified Small Entity Statement must also be filed (Note 37 CFR 1.9, 1.27, 1.28) (check if applicable).				\$0.00	
SUBTOTAL =				\$860.00	
Processing fee of \$130.00 for furnishing the English translation later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492 (f)).				\$0.00	
TOTAL NATIONAL FEE =				\$860.00	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31) (check if applicable).				\$0.00	
TOTAL FEES ENCLOSED =				\$860.00	
				Amount to be:	\$
				refunded	
				charged	\$

☒ A check in the amount of **\$860.00** to cover the above fees is enclosed.

☐ Please charge my Deposit Account No. _____ in the amount of _____ to cover the above fees.
 A duplicate copy of this sheet is enclosed.

☒ The Commissioner is hereby authorized to charge any fees which may be required, or credit any overpayment to Deposit Account No. **02-1818** A duplicate copy of this sheet is enclosed.

NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.

SEND ALL CORRESPONDENCE TO:

William E. Vaughan (Reg. No. 39,056)
 Bell, Boyd & Lloyd LLC
 P.O. Box 1135
 Chicago, Illinois 60690

SIGNATURE
 William E. Vaughan
 NAME
 39,056
 REGISTRATION NUMBER
 September 24, 2001
 DATE

BOX PCT

IN THE UNITED STATES ELECTED/DESIGNATED OFFICE
OF THE UNITED STATES PATENT AND TRADEMARK OFFICE
UNDER THE PATENT COOPERATION TREATY-CHAPTER II

5

PRELIMINARY AMENDMENT

APPLICANT: Christian Rappel DOCKET NO: 112740-312

SERIAL NO: GROUP ART UNIT:

EXAMINER:

INTERNATIONAL APPLICATION NO: PCT/DE00/00611

10 INTERNATIONAL FILING DATE: 1 March 2000

INVENTION: METHOD AND APPARATUS FOR ELECTRONICALLY
PROCESSING PURCHASING AND SALES
TRANSACTIONS

15 Assistant Commissioner for Patents,
Washington, D.C. 20231

Sir:

Please amend the above-identified International Application before entry
20 into the National stage before the U.S. Patent and Trademark Office under 35
U.S.C. §371 as follows:

In the Specification:

Please replace the Specification of the present application, including the
Abstract, with the following Substitute Specification:

25

SPECIFICATION

TITLE OF THE INVENTION

METHOD AND APPARATUS FOR ELECTRONICALLY
PROCESSING PURCHASING AND SALES TRANSACTIONS

BACKGROUND OF THE INVENTION

30

The present invention relates to a method and an apparatus for electronically
processing purchasing and sales transactions, which is referred to as electronic
commerce, using public communication networks; in particular, the Internet.

The practice of using the Internet, which is accessible throughout the world, as a comprehensive information network as well as for ordering or making use of products or services which are made available on it is known.

5 The processing of the actual payment transaction after the order, i.e., after the initiation of the payment procedure, is problematic.

Singleton, Cash on the Wirehead, BYTE, page 71, volume 20, No. 6, dated June 1995, discloses a number of payment processing methods which are all based on a credit card system and in which various methods are applied for the encrypted transmission of data.

10 It also already has been proposed to additionally secure the authorization of a payment by making a supplementary confirmation by telephone necessary.

US 5,794,221 discloses a payment method using the Internet. In this publication, first an agreement is made between an Internet provider and the customer and then a corresponding provision is specified between the provider and
15 the seller or service provider. The provider declares in this agreement that he/she will invoice the customer and accept responsibility for the settlement of payments with the seller or service provider. The provider himself/herself provides network access for the customer. The transaction information between the seller and customer is supplied simultaneously to the provider, which then performs the
20 corresponding activities such as invoicing and passing on the received payment. The provider is paid for the use of the provider's services.

In the previously known solution it became apparent that it was an advantage if it was not necessary for the customer to have to communicate his/her account number or similar personal data to the seller, thus preventing an undesired
25 temporary presence of this data set on the Internet which is virtually impossible to control.

However, it has become evident that in a method according to US 5,794,221, disadvantages occur in that the provider has to intervene actively into the proceedings relating to the invoicing and settlement of payment.
30 Furthermore, it is necessary for the customer to be identified with respect to the

provider, during which process it is not possible to prevent third parties being able to read and to make fraudulent use of this sensitive data about the provider.

In view of the above, an object of the present invention is to disclose a method and an apparatus for electronically processing purchasing and sales transactions, which is referred to as electronic commerce, using public communications networks, in particular the Internet, the intention being to increase security when accessing a network and making use of services via the network without having to impose security-related functions on the network provider.

SUMMARY OF THE INVENTION

10 The basic idea of the present invention consists, accordingly, in ordering goods and/or services via the Internet starting from a terminal which is capable of communication and has a display or monitor, in particular a personal computer, via an access node, and electronically paying for these goods and/or services, the terminal which is capable of communication processing the order data transfer via a
15 switching office.

After confirmation of the order, the access to the Internet starting from the switching office is at least briefly interrupted and a menu-prompted billing access to the switching office of the telecommunications network operator is set and/or set up. With the menu-prompted billing procedure, it is then possible to register, with
20 respect to billing, the order within the respective telephone account file relating to the terminal, and later settle payment via the customary processing of the services for the use of the telecommunications network.

It is a defining feature that before the order data or billing data is registered in the telephone account file, a PIN (Personal Identification Number) input together
25 with an authenticity check is carried out.

As a result of the at least brief disabling of the access between the Internet and the switching office, unauthorized access for a third party which has monitored the ordering process can be prevented. Of course, it is also possible to allow the link to exist online and block external access only within the framework which is
30 referred to as a firewall function.

The order data and billing data are then stored, for example, in a separate memory area of the telephone account file, it then being possible to register supplementary data such as information on the date and/or the specific type of goods or service.

5 The order data and billing data can be stored in coded form. It is also conceivable to provide for the data to be output on a customary telephone bill in encrypted form; for example, by reference to product or services codes.

Confirmation protocols, which are transferred to the service provider via the Internet in a fashion known per se are created in an automated fashion from the
10 registered and stored order data and billing data. The confirmation protocols do not, however, contain any security-related information; for example, the PIN, a credit card account number or the like.

A data link is established to the telephone data-registering computer, which is generally located in the switching office, is established in the respective
15 switching office after a menu item has been called and authenticated via the personal computer. It is possible also to activate the menu during the online state of the personal computer and access the Internet so that the user is capable, even when accessing a homepage of a service provider, to activate a menu bar and/or open the appropriate menu in order to, if desired, bring about the payment processing, during
20 which care is automatically taken to ensure that the Internet access is interrupted or the firewall protection measure is activated at the relevant moment.

In order to increase security, the order data is firstly loaded onto the terminal, namely the personal computer, via the Internet, and the order is registered at the service provider end. Then, in a separate link, the set of billing data
25 associated with the order is transmitted from the terminal of the memory to the switching office and registered there in a debit file after authenticity checking. The registration of the accounts receivable is then transferred to the service provider together with an identifier as a confirmation.

At the device end, a terminal which is capable of communication and has a
30 display (personal computer) is provided for carrying out the method, the terminal

being connected to a switching office via the telephone network. The switching office sets up access to an Internet access computer (provider) via an appropriate data line.

5 The switching office contains an internode module, the internode module converting incoming telephone data when data is transferred between the Internet access computer and the terminal into a format which is suitable for display on, or storage in, the personal computer or terminal, but also transforming data records derived from the Internet data transfer into a switching-office format. The internode module creates, as it were, a symbiosis between telephone traffic and
10 digital data transfer.

Additional features and advantages of the present invention are described in, and will be apparent from, the following Detailed Description of the Invention and Figures.

BRIEF DESCRIPTION OF THE FIGURES

15 Figure 1 shows a basic view of the access to the Internet starting from a personal computer in connection with the teachings of the present invention.

DETAILED DESCRIPTION OF THE INVENTION

The terminal, in particular a PC 1, is connected to the public telephone network via a suitable modem or an interface. In the relevant supply area, at least
20 one switching office 3 is provided which both sets up call-number-selected links and registers call times for later billing.

A link is established via the switching office 3 to an Internet access computer 4 which is operated by what is referred to as a provider.

The Internet access provider 4 then permits access to the Internet which is
25 illustrated symbolically by the reference symbol 5.

In the switching office there is an internode module 6 which makes it possible for services of conventional telephone systems to be provided with the possibilities of Internet-enabled personal computers. The internode makes it possible for network operators and users to use their existing infrastructure such as
30 leads or switching systems in a systematic fashion for the World Wide Web.

In particular, in the exemplary embodiment, the order data transfer is processed via the switching office when Internet services are made use of. Such use can be, for example, the ordering of goods or services.

After confirmation of the order, the access from the switching office 3 via
5 the access computer 4, or the access to the Internet, is briefly interrupted or disabled for incoming data in order to optimize security. In the personal computer 1, a menu-prompted billing access to the switching office 3 is then established and/or set up in order then to register, with respect to billing, the order within a corresponding terminal-related telephone account file or to process payment via the
10 customary processing of the services for the use of the telecommunications networks; for example, the call data registration.

Of course, for reasons of security, it is also expedient here to carry out authenticity checking of the user with respect to the personal computer by, for example, inputting and interrogating a PIN. Furthermore, for later verification
15 purposes, the order data and billing data should be stored in a separate memory area of the telephone account file in the switching office or in a computer located there.

The user who has made use of the Internet service via the personal computer 1, then receives, for example with his/her monthly telephone bill, a request to pay for the goods ordered or services provided.

20 In the method described, the possibility of personal data such as credit card numbers, account information or the like being conducted over the Internet is ruled out. The particular problem with the Internet is that data and information are held and buffered for a relatively long time on various node computers, and also at the providers, and that as a result of the channeling of a multiplicity of information
25 there is always the risk of third parties interrogating data in a selected fashion and making fraudulent use of it.

The order data and billing data which are stored in the switching office 3 or a computer located there are then used for automatically creating a confirmation protocol which is communicated to the service provider via the Internet. This
30 communication can take place directly after the order but also at times of little

traffic so that only low supplementary costs are incurred for the operator of the public telephone network 2.

In a further exemplary embodiment, a menu item or a menu is activated by the personal computer 1 after the call and authentication confirmation, and a link is
5 established to the switching office; i.e., a data link to the telephone data-registering computer. Of course, the menu also can be activated during the online state of the personal computer and instantaneous access to the Internet, the transmission of order data with the consequent production of billing data being, however, not performed until after the Internet link has been disconnected.

10 To do this, the order data first can be loaded onto the personal computer 1 over the Internet, and the order registered at the service provider end. The billing data associated with the order is then transmitted, with a separate link, from the personal computer 1 to the switching office 3 and registered in a debit file after further authenticity checking. The confirmation of the accounts receivable
15 registration with the service provider via an identifier is also carried out separately.

The switching-office-end operator, for example the telephone company, performs the settlement of the payment to the service provider or supplier after receipt of payment has been indicated.

20 The present solution provides the advantage that security-related personal data no longer has to be transferred over the public Internet, providing significant advantages in terms of security during payment transactions and the trust of users and customers in the payment system.

Although the present invention has been described with reference to specific
25 embodiments, those of skill in the art will recognize that changes may be made thereto without departing from the spirit and scope of the invention as set forth in the hereafter appended claims.

ABSTRACT OF THE DISCLOSURE

A method and apparatus for electronically processing purchasing and sales transactions using public communications networks, wherein an data transfer is processed via a switching office via a personal computer, and the payment for the goods received or services provided is carried out, in a way similar to the production of a telephone bill, via a menu-prompted billing access to the switching office, without it being necessary to transmit security-related data over the Internet.

In the claims:

On page 9, cancel line 1, and substitute the following left-hand justified heading therefor:

CLAIMS

Please cancel claims 1-8, without prejudice, and substitute the following claims therefor:

9. A method for electronically processing purchasing and sales transactions using the Internet, wherein goods and services may be ordered via at least one personal computer via an access node, and the goods and services are invoiced and paid for electronically, the method comprising the steps of:
- processing, via the personal computer, an order data transfer via a switching office;
 - interrupting, at least briefly, access to the Internet starting from the switching office after confirmation of the order; and
 - establishing a menu-prompted billing access to the switching office of the telephone network operator in order to register, with respect to billing, the order within a respective terminal-related telephone account file via customary processing of the services for use of the telephone network.

10. A method for electronically processing purchasing and sales transactions as claimed in Claim 9, the method further comprising the step of:
- running a PIN-inputting and PIN-checking mode before the order data and billing data are registered in the telephone account file.

11. A method for electronically processing purchasing and sales transactions as claimed in Claim 9, the method further comprising the step of:
storing the order data and the billing data in a separate memory area of the telephone account file.

5

12. A method for electronically processing purchasing and sales transactions as claimed in Claim 11, wherein the order data and the billing data are stored in coded form.

10

13. A method for electronically processing purchasing and sales transactions as claimed in Claim 9, the method further comprising the steps of:
creating a confirmation protocol in an automated fashion from one of the registered order data and the billing data; and
transferring the confirmation protocol to the service provider via the
15 Internet.

14. A method for electronically processing purchasing and sales transactions as claimed in Claim 9, the method further comprising the step of:
establishing a data link to the telephone data-registering computer in the
20 respective switching office after a menu item has been called and authenticated via the personal computer, wherein it is possible to activate the menu even during an on-line state of the personal computer and access the Internet.

15. A method for electronically processing purchasing and sales
25 transactions as claimed in Claim 9, the method further comprising the steps of:
loading the order data onto the terminal via the Internet;
registering the order data at the service provider;
transmitting the billing data associated with the order, in a separate link,
from the terminal memory to the switching office;

registering the billing data at the switching office in a debit file after authenticity checking; and

transferring registration of accounts receivable to the service provider with an identifier as a confirmation.

5

16. An apparatus for electronically processing purchasing and sales transactions using the Internet, wherein goods and services are invoiced and paid for electronically, comprising a terminal which is capable of communication and a display, wherein the apparatus is connected to a switching office via a telephone
10 network, the switching office setting up access to an Internet access computer via a data line, the switching office having an internode module for transforming incoming telephone data when data is transferred between the Internet access computer and the apparatus into a format which is suitable for display and storage in the terminal and for transforming data records derived from the Internet data
15 transfer into a switching-office format, and wherein the apparatus processes order data transfer via the switching office, access to the Internet starting from the switching office being at least briefly interrupted after confirmation of the order, and a menu-prompted billing access to the switching office of the telephone network operator is established in order to register, with respect to billing, the order
20 within a respective terminal-related telephone account file via the customary processing of the services for use of the telephone network.

REMARKS

The present amendment makes editorial changes and corrects typographical errors in the specification, which includes the Abstract, in order to conform the
25 specification to the requirements of United States Patent Practice. No new matter is added thereby. Attached hereto is a marked-up version of the changes made to the specification by the present amendment. The attached page is captioned "**Version With Markings To Show Changes Made**".

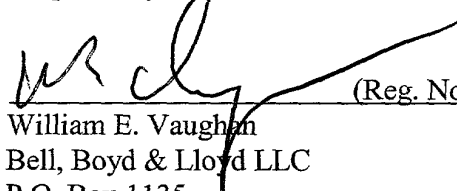
In addition, the present amendment cancels original claims 1-8 in favor of
30 new claims 9-16. Claims 9-16 have been presented solely because the revisions by

crossing out and underlining which would have been necessary in claims 1-8 in order to present those claims in accordance with preferred United States Patent Practice would have been too extensive, and thus would have been too burdensome. The present amendment is intended for clarification purposes only and not for

5 substantial reasons related to patentability pursuant to 35 U.S.C. §§103, 102, 103 or 112. Indeed, the cancellation of claims 1-8 does not constitute an intent on the part of the Applicants to surrender any of the subject matter of claims 1-8.

Early consideration on the merits is respectfully requested.

Respectfully submitted,



(Reg. No. 39,056)

William E. Vaughan
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P.O. Box 1135
Chicago, Illinois 60690-1135
(312) 807-4292
Attorneys for Applicant

Version With Markings To Show Changes Made

Description SPECIFICATION

~~Method and device for electronically processing purchasing and sales transactions~~

TITLE OF THE INVENTION

5 METHOD AND APPARATUS FOR ELECTRONICALLY
PROCESSING PURCHASING AND SALES TRANSACTIONS

BACKGROUND OF THE INVENTION

10 The present invention relates to a method and ~~a device~~ an apparatus for electronically processing purchasing and sales transactions, which is referred to as electronic commerce, using public communication networks, ~~in particular the Internet, as claimed in the preamble of patent claims 1 and 8; in particular, the Internet.~~

15 The practice of using the Internet, which is accessible throughout the world, as a comprehensive information network as well as for ~~also~~ ordering or making use of products or services which are made available on it is known.

 The processing of the actual payment transaction after the order, i.e., after the initiation of the payment procedure, is problematic.

20 Singleton, Cash on the Wirehead, BYTE, page 71, volume 20, No. 6, dated June 1995, discloses a ~~plurality~~ number of payment processing methods which are all based on a credit card system and in which various methods are applied for the encrypted transmission of data.

 It ~~has~~ also already has been proposed to additionally secure the authorization of a payment by making a supplementary confirmation by telephone necessary.

25 US 5,794,221 discloses a payment method using the Internet. In ~~said~~ this publication, ~~firstly~~ first an agreement is made between an Internet provider and the customer and then a corresponding provision is specified between the provider and the seller or service provider. The provider declares in this agreement that ~~he~~ he/she will invoice the customer and

accept responsibility for the settlement of payments with the seller or service provider. The provider ~~himself~~ himself/herself provides network access for the customer. The transaction information between the seller and customer is supplied simultaneously to the provider, which then performs the corresponding activities such as invoicing and passing on the received payment. The provider is paid for the use of the provider's services.

In the previously known solution it became apparent that it was an advantage if it was not necessary for the customer to have to communicate his his/her account number or similar personal data to the seller, thus preventing an undesired temporary presence of this data set on the Internet which is virtually impossible to control.

However, it has become evident that in a method according to US 5,794,221, disadvantages occur in that the provider has to intervene actively into the proceedings relating to the invoicing and settlement of payment. Furthermore, it is necessary for the customer to be identified with respect to the provider, during which process it is not possible to prevent third parties being able to read and to make fraudulent use of this sensitive data about the provider.

In view of the above, ~~the~~ an object of the present invention is to disclose a method and ~~a device~~ an apparatus for electronically processing purchasing and sales transactions, which is referred to as electronic commerce, using public communications networks, in particular the Internet, the intention being to increase security when accessing a network and making use of services via the network without having to impose security-related functions on the network provider.

~~The object is achieved according to the invention with a method as defined according to patent claim 1, and with a device for carrying out the method according to the features of patent claim 8.~~

SUMMARY OF THE INVENTION

The basic idea of the present invention consists, accordingly, in ordering goods and/or services ~~by means of~~ via the Internet starting from a terminal which is capable of communication and has a display or monitor, in particular a personal

computer, via an access node, and electronically paying for these goods and/or services, the terminal which is capable of communication processing the order data transfer via a switching office.

5 After confirmation of the order, the access to the Internet starting from the switching office is at least briefly interrupted and a menu-prompted billing access to the switching office of the telecommunications network operator is set and/or set up. With the menu-prompted billing procedure, it is then possible to register, with respect to billing, the order within the respective telephone account file relating to the terminal, and later settle payment ~~by means of~~ via the customary processing of
10 the services for the use of the telecommunications network.

It is a defining feature that before the order data or billing data is registered in the telephone account file, a PIN (Personal Identification Number) input together with ~~checking, i.e. an~~ authenticity check, is carried out.

As a result of the at least brief disabling of the access between the Internet
15 and the switching office, unauthorized access for a third party which has monitored the ordering process can be prevented. Of course, it is also possible to allow the link to exist online and block external access only within the framework which is referred to as a firewall function.

The order data and billing data are then stored, for example, in a separate
20 memory area of the telephone account file, it then being possible to register supplementary data such as information on the date and/or the specific type of goods or service.

The order data and billing data can be stored in coded form. It is also conceivable to provide for the data to be output on a customary telephone bill in
25 encrypted form; for example, by reference to product or services codes.

Confirmation protocols, which are transferred to the service provider via the Internet in a fashion known per se are created in an automated fashion from the registered and stored order data and billing data. The confirmation protocols do not, however, contain any security-related information; for example, the PIN, a
30 credit card account number or the like.

A data link is established to the telephone data-registering computer, which is generally located in the switching office, is established in the respective switching office after a menu item has been called and authenticated ~~by means of~~ via the personal computer, it being. It is possible also to activate the menu during
5 the online state of the personal computer and access the Internet so that the user is capable, even when accessing a homepage of a service provider, to activate a menu bar and/or open the appropriate menu in order ~~then to~~, if desired, ~~to~~ bring about the payment processing, during which care is automatically taken to ensure that the Internet access is interrupted or the firewall protection measure is activated at the
10 relevant moment.

In order to increase security, the order data is firstly loaded onto the terminal, namely the personal computer, via the Internet, and the order is registered at the service provider end. Then, in a separate link, the set of billing data associated with the order is transmitted from the terminal of the memory to the
15 switching office and registered there in a debit file after authenticity checking. The registration of the accounts receivable is then transferred to the service provider together with an identifier as a confirmation.

At the device end, a terminal which is capable of communication and has a display (personal computer) is provided for carrying out the method, ~~said the~~
20 terminal being connected to a switching office via the telephone network. The switching office sets up access to an Internet access computer (provider) via an appropriate data line.

The switching office contains an internode module, ~~said the~~ internode module converting incoming telephone data when data is transferred between the
25 Internet access computer and the terminal into a format which is suitable for display on, or storage in, the personal computer or terminal, but also transforming data records derived from the Internet data transfer into a switching-office format. The internode module creates, as it were, a symbiosis between telephone traffic and digital data transfer.

The invention will be explained in more detail by means of an exemplary embodiment and a figure.

Additional features and advantages of the present invention are described in, and will be apparent from, the following Detailed Description of the Invention and
5 Figures.

The figure shows here

BRIEF DESCRIPTION OF THE FIGURES

Figure 1 shows a basic view of the access to the Internet starting from a personal computer in connection with the teachings of the present invention.

DETAILED DESCRIPTION OF THE INVENTION

The terminal, in particular a PC 1, is connected to the public telephone network via a suitable modem or an interface. In the relevant supply area, at least one switching office 3 is provided which both sets up call-number-selected links and registers call times for later billing.

15 A link is established via the switching office 3 to an Internet access computer 4 which is operated by what is referred to as a provider.

The Internet access provider 4 then permits access to the Internet which is illustrated symbolically by the reference symbol 5.

In the switching office there is an internode module 6 which makes it
20 possible for services of conventional telephone systems to be provided with the possibilities of Internet-enabled personal computers. The internode makes it possible for network operators and users to use their existing infrastructure such as leads or switching systems in a systematic fashion for the World Wide Web.

In particular, in the exemplary embodiment, the order data transfer is
25 processed via the switching office when Internet services are made use of. Such use can be, for example, the ordering of goods or services.

After confirmation of the order, the access from the switching office 3 via the access computer 4, or the access to the Internet, is briefly interrupted or disabled for incoming data in order to optimize security. In the personal computer 1, a
30 menu-prompted billing access to the switching office 3 is then established and/or

set up in order then to register, with respect to billing, the order within a corresponding terminal-related telephone account file or to process payment ~~by means of~~ via the customary processing of the services for the use of the telecommunications networks; for example, the call data registration.

5 Of course, for reasons of security, it is also expedient here to carry out authenticity checking ~~of the~~ of the user with respect to the personal ~~computer~~ computer by, for example, inputting and interrogating a PIN. Furthermore,

for later verification purposes, the order data and billing data should be stored in a separate memory area of the telephone account file in the switching
10 office or in a computer located there.

The user who has made use of the Internet service via the personal computer 1, then receives, for example with ~~his~~ his/her monthly telephone bill, a request to pay for the goods ordered or services provided.

In the method described, the possibility of personal data such as credit card
15 numbers, account information or the like being conducted over the Internet is ruled out. The particular problem with the Internet is that data and information are held and buffered for a relatively long time on various node computers, and also at the providers, and that as a result of the channeling of a multiplicity of information there is always the risk of third parties interrogating data in a selected fashion and
20 making fraudulent use of it.

The order data and billing data which are stored in the switching office 3 or a computer located there are then used for automatically creating a confirmation protocol which is communicated to the service provider via the Internet. This communication can take place directly after the order but also at times of little
25 traffic so that only low supplementary costs are incurred for the operator of the public telephone network 2.

In a further exemplary embodiment, a menu item or a menu is activated by the personal computer 1 after the call and authentication confirmation, and a link is established to the switching office; i.e., a data link to the telephone data-registering
30 computer. Of course, the menu ~~can~~ also can be activated during the online state of

the personal computer and instantaneous access to the Internet, the transmission of order data with the consequent production of billing data being, however, not performed until after the Internet link has been disconnected.

5 To do this, the order data first can ~~firstly~~ be loaded onto the personal computer 1 over the Internet, and the order registered at the service provider end. The billing data associated with the order is then transmitted, with a separate link, from the personal computer 1 to the switching office 3 and registered in a debit file after further authenticity checking. The confirmation of the accounts receivable registration with the service provider ~~by means of~~ via an identifier is also carried
10 out separately.

The switching-office-end operator, for example the telephone company, performs the settlement of the payment to the service provider or supplier after receipt of payment has been indicated.

The present solution provides the advantage that security-related personal
15 data no longer has to be transferred over the public Internet, providing significant advantages in terms of security during payment transactions and the trust of users and customers in the payment system.

Patent Claims Although the present invention has been described with reference to specific embodiments, those of skill in the art will recognize that
20 changes may be made thereto without departing from the spirit and scope of the invention as set forth in the hereafter appended claims.

ABSTRACT OF THE DISCLOSURE

~~The invention relates to a method and a device~~ A method and apparatus for electronically processing purchasing and sales transactions using public communications networks. ~~An order, wherein an~~ data transfer is processed via a switching office (3) ~~by means of~~ via a personal computer(4). ~~The, and the~~ payment for the goods received or services provided is carried out, in a way similar to the production of a telephone bill, ~~by means of~~ via a menu-prompted billing access to the switching office, without it being necessary to transmit security-related data over the Internet(5).

10

Figure

BOX PCT

IN THE UNITED STATES ELECTED/DESIGNATED OFFICE
OF THE UNITED STATES PATENT AND TRADEMARK OFFICE
UNDER THE PATENT COOPERATION TREATY-CHAPTER II

SUBMISSION OF DRAWINGS

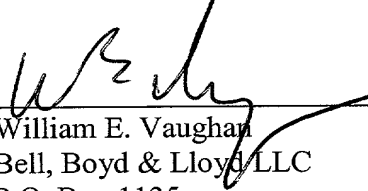
APPLICANT: Christian Rappel DOCKET NO.: 112740-312
SERIAL NO: GROUP ART UNIT:
FILED: EXAMINER:
INTERNATIONAL APPLICATION NO. PCT/DE00/00611
INTERNATIONAL FILING DATE: 1 March 2000
INVENTION: METHOD AND APPARATUS FOR ELECTRONICALLY
PROCESSING PURCHASING AND SALES TRANSACTIONS

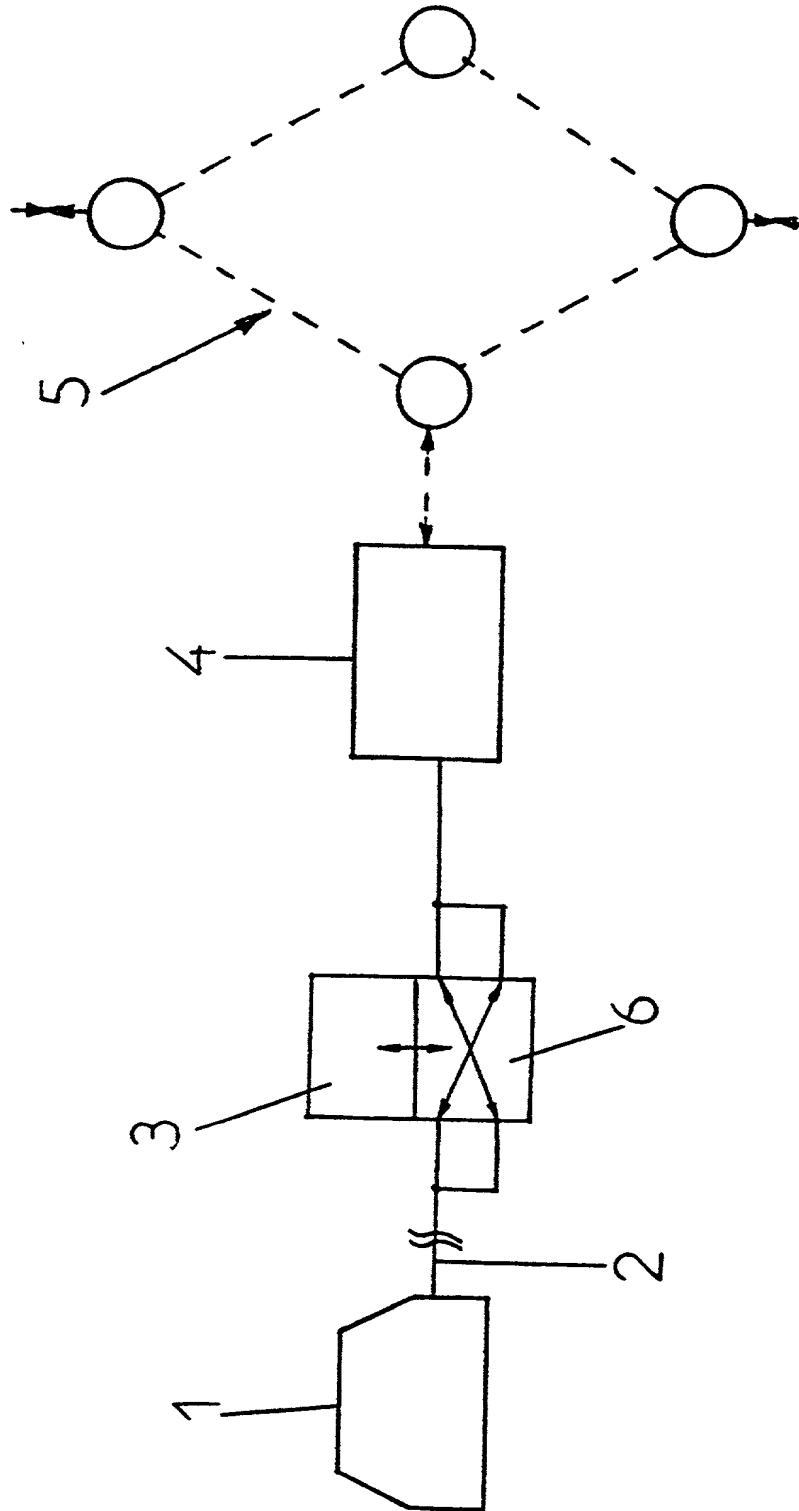
Assistant Commissioner for Patents,
Washington, D.C. 20231

Sir:

Applicant herewith submits one sheet (Fig. 1) of drawings for the above-
referenced PCT application.

Respectfully submitted,


(Reg. No. 39,056)
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Attorneys for Applicant



GR 99 P 1477

1/pst/s

Description

Method and device for electronically processing purchasing and sales transactions

5

The invention relates to a method and a device for electronically processing purchasing and sales transactions, which is referred to as electronic commerce, using public communication networks, in particular the Internet, as claimed in the preamble of patent claims 1 and 8.

The practice of using the Internet, which is accessible throughout the world, as a comprehensive information network for also ordering or making use of products or services which are made available on it is known.

The processing of the actual payment transaction after the order, i.e. after the initiation of the payment procedure, is problematic.

Singleton, Cash on the Wirehead, BYTE, page 71, volume 20, No. 6, dated June 1995, discloses a plurality of payment processing methods which are all based on a credit card system and in which various methods are applied for the encrypted transmission of data.

It has also already been proposed to additionally secure the authorization of a payment by making a supplementary confirmation by telephone necessary.

US 5,794,221 discloses a payment method using the Internet. In said publication, firstly an agreement is made between an Internet provider and the customer and then a corresponding provision is specified between the provider and the seller or service provider. The provider declares in this agreement that he will invoice the customer and

accept responsibility for the settlement of payments with the seller or service provider. The provider himself provides network access for the customer. The transaction information between the seller and customer
5 is supplied simultaneously to the provider, which then performs the corresponding activities such as invoicing and passing on the received payment. The provider is paid for the use of the provider's services.

10 In the previously known solution it became apparent that it was an advantage if it was not necessary for the customer to have to communicate his account number or similar personal data to the seller, thus preventing an undesired temporary presence of this data set on the
15 Internet which is virtually impossible to control.

However, it has become evident that in a method according to US 5,794,221, disadvantages occur in that the provider has to intervene actively into the
20 proceedings relating to the invoicing and settlement of payment. Furthermore, it is necessary for the customer to be identified with respect to the provider, during which process it is not possible to prevent third parties being able to read and to make fraudulent use
25 of this sensitive data about the provider.

In view of the above, the object of the invention is to disclose a method and a device for electronically processing purchasing and sales transactions, which is
30 referred to as electronic commerce, using public communications networks, in particular the Internet, the intention being to increase security when accessing a network and making use of services via the network without having to impose security-related functions on
35 the network provider.

The object is achieved according to the invention with a method as defined according to patent claim 1, and

with a device for carrying out the method according to the features of patent claim 8.

The basic idea of the invention consists accordingly in
5 ordering goods and/or services by means of the Internet
starting from a terminal which is capable of
communication and has a display or monitor, in
particular a personal computer, via an access node, and
electronically paying for these goods and/or services,
10 the terminal which is capable of communication
processing the order data transfer via a switching
office.

After confirmation of the order, the access to the
15 Internet starting from the switching office is at least
briefly interrupted and a menu-prompted billing access
to the switching office of the telecommunications
network operator is set and/or set up. With the menu-
prompted billing procedure, it is then possible to
20 register, with respect to billing, the order within the
respective telephone account file relating to the
terminal, and later settle payment by means of the
customary processing of the services for the use of the
telecommunications network.

25 It is a defining feature that before the order data or
billing data is registered in the telephone account
file, a PIN (Personal Identification Number) input
together with checking, i.e. authenticity check, is
30 carried out.

As a result of the at least brief disabling of the
access between the Internet and the switching office,
unauthorized access for a third party which has
35 monitored the ordering process can be prevented. Of
course, it is also possible to allow the link to exist
online and block external access only within the
framework which is referred to as a firewall function.

The order data and billing data are then stored, for example, in a separate memory area of the telephone account file, it then being possible to register supplementary data such as information on the date and/or the specific type of goods or service.

The order data and billing data can be stored in coded form. It is also conceivable to provide for the data to be output on a customary telephone bill in encrypted form, for example by reference to product or services codes.

Confirmation protocols, which are transferred to the service provider via the Internet in a fashion known per se are created in an automated fashion from the registered and stored order data and billing data. The confirmation protocols do not, however, contain any security-related information, for example the PIN, a credit card account number or the like.

A data link is established to the telephone data-registering computer, which is generally located in the switching office, is established in the respective switching office after a menu item has been called and authenticated by means of the personal computer, it being possible also to activate the menu during the online state of the personal computer and access the Internet so that the user is capable, even when accessing a homepage of a service provider, to activate a menu bar and/or open the appropriate menu in order then, if desired, to bring about the payment processing, during which care is automatically taken to ensure that the Internet access is interrupted or the firewall protection measure is activated at the relevant moment.

In order to increase security, the order data is firstly loaded onto the terminal, namely the personal computer, via the Internet, and the order is registered at the service provider end. Then, in a separate link, the

set of billing data associated with the order is transmitted from the terminal of the memory to the switching office and registered there in a debit file after authenticity checking. The registration of the
5 accounts receivable is then transferred to the service provider together with an identifier as a confirmation.

At the device end, a terminal which is capable of communication and has a display (personal computer) is
10 provided for carrying out the method, said terminal being connected to a switching office via the telephone network. The switching office sets up access to an Internet access computer (provider) via an appropriate data line.

15 The switching office contains an internode module, said internode module converting incoming telephone data when data is transferred between the Internet access computer and the terminal into a format which is
20 suitable for display on or storage in the personal computer or terminal, but also transforming data records derived from the Internet data transfer into a switching-office format. The internode module creates, as it were, a symbiosis between telephone traffic and
25 digital data transfer.

The invention will be explained in more detail by means of an exemplary embodiment and a figure.

30 The figure shows here a basic view of the access to the Internet starting from a personal computer.

The terminal, in particular a PC 1, is connected to the public telephone network via a suitable modem or an
35 interface. In the relevant supply area, at least one switching office 3 is provided which both sets up call-number-selected links and registers call times for later billing.

A link is established via the switching office 3 to an Internet access computer 4 which is operated by what is referred to as a provider.

- 5 The Internet access provider 4 then permits access to the Internet which is illustrated symbolically by the reference symbol 5.

10 In the switching office there is an internode module 6 which makes it possible for services of conventional telephone systems to be provided with the possibilities of Internet-enabled personal computers. The internode makes it possible for network operators and users to use their existing infrastructure such as leads or
15 switching systems in a systematic fashion for the World Wide Web.

In particular, in the exemplary embodiment, the order data transfer is processed via the switching office
20 when Internet services are made use of. Such use can be, for example, the ordering of goods or services.

After confirmation of the order, the access from the switching office 3 via the access computer 4, or the
25 access to the Internet, is briefly interrupted or disabled for incoming data in order to optimize security. In the personal computer 1, a menu-prompted billing access to the switching office 3 is then established and/or set up in order then to register,
30 with respect to billing, the order within a corresponding terminal-related telephone account file or to process payment by means of the customary processing of the services for the use of the telecommunications networks, for example the call data
35 registration.

Of course, for reasons of security, it is also expedient here to carry out authenticity checking of

the user with respect to the personal computer¹ by, for example inputting and interrogating a PIN. Furthermore,

for later verification purposes, the order data and billing data should be stored in a separate memory area of the telephone account file in the switching office or in a computer located there.

5

The user who has made use of the Internet service via the personal computer 1, then receives, for example with his monthly telephone bill, a request to pay for the goods ordered or services provided.

10

In the method described, the possibility of personal data such as credit card numbers, account information or the like being conducted over the Internet is ruled out. The particular problem with the Internet is that data and information are held and buffered for a relatively long time on various node computers, and also at the providers, and that as a result of the channeling of a multiplicity of information there is always the risk of third parties interrogating data in a selected fashion and making fraudulent use of it.

15

20

The order data and billing data which are stored in the switching office 3 or a computer located there are then used for automatically creating a confirmation protocol which is communicated to the service provider via the Internet. This communication can take place directly after the order but also at times of little traffic so that only low supplementary costs are incurred for the operator of the public telephone network 2.

25

30

In a further exemplary embodiment, a menu item or a menu is activated by the personal computer 1 after the call and authentication confirmation, and a link is established to the switching office, i.e. a data link to the telephone data-registering computer. Of course, the menu can also be activated during the online state of the personal computer and instantaneous access to the Internet,

35

the transmission of order data with the consequent production of billing data being however, not performed until after the Internet link has been disconnected.

5 To do this, the order data can firstly be loaded onto the personal computer 1 over the Internet, and the order registered at the service provider end. The billing data associated with the order is then transmitted, with a separate link, from the personal
10 computer 1 to the switching office 3 and registered in a debit file after further authenticity checking. The confirmation of the accounts receivable registration with the service provider by means of an identifier is also carried out separately.

15 The switching-office-end operator, for example the telephone company, performs the settlement of the payment to the service provider or supplier after receipt of payment has been indicated.

20 The present solution provides the advantage that security-related personal data no longer has to be transferred over the public Internet, providing significant advantages in terms of security during
25 payment transactions and the trust of users and customers in the payment system.

Patent Claims

1. A method for electronically processing purchasing
and sales transactions using public communications
5 networks, in particular the Internet (5), goods
and/or services being ordered by means of at least
one terminal (1) which is capable of communication
and has a display, in particular a personal
computer, via an access node (4), and these goods
10 and/or services being invoiced and paid for
electronically, characterized in that the at least
one terminal which is capable of communication and
has a display processes the order data transfer
via a switching office (3), the access to the
15 Internet starting from the switching office being
at least briefly interrupted or disabled after
confirmation of the order and a menu-prompted
billing access to the switching office of the
telephone network operator being established
20 and/or set up in order to register, with respect
to billing, the order within the respective
terminal-related telephone account file by means
of the customary processing of the services for
the use of the telephone network.
25
2. The method as claimed in claim 1, characterized in
that, before the order data and billing data are
registered in the telephone account file, a PIN-
inputting and PIN-checking mode runs.
30
3. The method as claimed in claim 1 or 2,
characterized in that the order data and billing
data are stored in a separate memory area of the
telephone account file.
35
4. The method as claimed in claim 3, characterized in
that the order data and billing data are stored in
coded form.

5. The method as claimed in one of the preceding claims, characterized in that a confirmation protocol is created in an automated fashion from the registered order data or billing data and is transferred to the service provider via the Internet.
6. The method as claimed in one of the preceding claims, characterized in that a data link to the telephone data-registering computer is established in the respective switching office after a menu item has been called and authenticated by means of the terminal which is capable of communication, in particular a personal computer, it being possible to activate the menu even during the online state of the personal computer and access the Internet.
7. The method as claimed in one of the preceding claims, characterized in that firstly the order data is loaded onto the terminal via the Internet and the order is registered at the service provider and subsequently the billing data associated with the order is transmitted, in a separate link, from the terminal memory to the switching office and registered there in a debit file after authenticity checking and the registration of the accounts receivable is transferred to the service provider with an identifier as a confirmation.
8. A device for carrying out the method as claimed in one of claims 1 to 7, having a terminal which is capable of communication and has a display, in particular a personal computer, which is connected to a switching office via the telephone network, the switching office setting up access to an Internet access computer via a data line, characterized in that the switching office (3) has

an internode module (6), said internode module (6) transforming incoming telephone data when data is transferred between the Internet

access computer (4) and the terminal (1) into a format which is suitable for display on or storage in the terminal (1), and transforming data records derived from the Internet data transfer into a switching-office format.

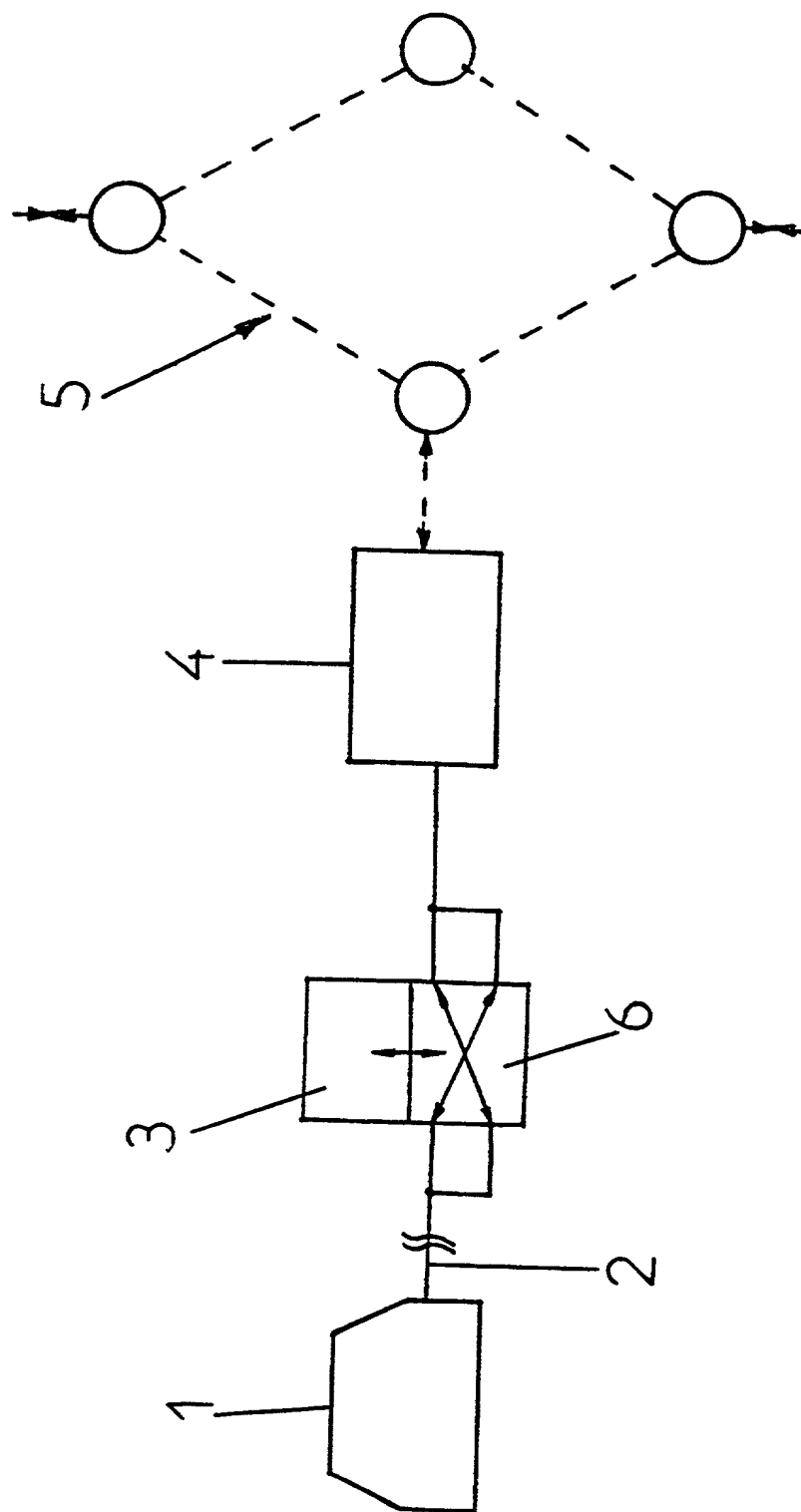
5

Abstract

Method and device for electronically processing purchasing and sales transactions

The invention relates to a method and a device for electronically processing purchasing and sales transactions using public communications networks. An order data transfer is processed via a switching office (3) by means of a personal computer (1). The payment for the goods received or services provided is carried out, in a way similar to the production of a telephone bill, by means of a menu-prompted billing access to the switching office, without it being necessary to transmit security-related data over the Internet (5).

Figure



Declaration and Power of Attorney For Patent Application

Erklärung Für Patentanmeldungen Mit Vollmacht

German Language Declaration

Als nachstehend benannter Erfinder erkläre ich hiermit an Eides Statt:

As a below named inventor, I hereby declare that:

dass mein Wohnsitz, meine Postanschrift, und meine Staatsangehörigkeit den im Nachstehenden nach meinem Namen aufgeführten Angaben entsprechen,

My residence, post office address and citizenship are as stated below next to my name,

dass ich, nach bestem Wissen der ursprüngliche, erste und alleinige Erfinder (falls nachstehend nur ein Name angegeben ist) oder ein ursprünglicher, erster und Miterfinder (falls nachstehend mehrere Namen aufgeführt sind) des Gegenstandes bin, für den dieser Antrag gestellt wird und für den ein Patent beantragt wird für die Erfindung mit dem Titel:

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

Verfahren und Vorrichtung zur elektronischen Abwicklung von Kauf- und Verkaufshandlungen

Method and device for electronically processing buying and selling operations

deren Beschreibung

the specification of which

(zutreffendes ankreuzen)

(check one)

☐ hier beigefügt ist.

☐ is attached hereto.

☒ am 01.03.2000 als

☒ was filed on 01.03.2000 as

PCT internationale Anmeldung

PCT international application

PCT Anmeldungsnummer PCT/DE00/00611

PCT Application No. PCT/DE00/00611

eingereicht wurde und am _____
abgeändert wurde (falls tatsächlich abgeändert).

and was amended on _____
(if applicable)

Ich bestätige hiermit, dass ich den Inhalt der obigen Patentanmeldung einschliesslich der Ansprüche durchgesehen und verstanden habe, die eventuell durch einen Zusatzantrag wie oben erwähnt abgeändert wurde.

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims as amended by any amendment referred to above.

Ich erkenne meine Pflicht zur Offenbarung irgendwelcher Informationen, die für die Prüfung der vorliegenden Anmeldung in Einklang mit Absatz 37, Bundesgesetzbuch, Paragraph 1.56(a) von Wichtigkeit sind, an.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56(a).

Ich beanspruche hiermit ausländische Prioritätsvorteile gemäss Abschnitt 35 der Zivilprozessordnung der Vereinigten Staaten, Paragraph 119 aller unten angegebenen Auslandsanmeldungen für ein Patent oder eine Erfindersurkunde, und habe auch alle Auslandsanmeldungen für ein Patent oder eine Erfindersurkunde nachstehend gekennzeichnet, die ein Anmeldedatum haben, das vor dem Anmeldedatum der Anmeldung liegt, für die Priorität beansprucht wird.

I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

German Language Declaration

Prior foreign applications
Priorität beansprucht

Priority Claimed

19913096.5

DE

23.03.1999

☒

☐

(Number)
(Nummer)

(Country)
(Land)

(Day Month Year Filed)
(Tag Monat Jahr eingereicht)

Yes
Ja

No
Nein

(Number)
(Nummer)

(Country)
(Land)

(Day Month Year Filed)
(Tag Monat Jahr eingereicht)

☐
Yes
Ja

☐
No
Nein

(Number)
(Nummer)

(Country)
(Land)

(Day Month Year Filed)
(Tag Monat Jahr eingereicht)

☐
Yes
Ja

☐
No
Nein

Ich beanspruche hiermit gemäss Absatz 35 der Zivilprozessordnung der Vereinigten Staaten, Paragraph 120, den Vorzug aller unten aufgeführten Anmeldungen und falls der Gegenstand aus jedem Anspruch dieser Anmeldung nicht in einer früheren amerikanischen Patentanmeldung laut dem ersten Paragraphen des Absatzes 35 der Zivilprozessordnung der Vereinigten Staaten, Paragraph 122 offenbart ist, erkenne ich gemäss Absatz 37, Bundesgesetzbuch, Paragraph 1.56(a) meine Pflicht zur Offenbarung von Informationen an, die zwischen dem Anmeldedatum der früheren Anmeldung und dem nationalen oder PCT internationalen Anmeldedatum dieser Anmeldung bekannt geworden sind.

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §122, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application.

PCT/DE00/00611

(Application Serial No.)
(Anmeldeseriennummer)

01.03.2000

(Filing Date D, M, Y)
(Anmeldedatum T, M, J)

anhängig

(Status)
(patentiert, anhängig,
aufgegeben)

pending

(Status)
(patented, pending,
abandoned)

(Application Serial No.)
(Anmeldeseriennummer)

(Filing Date D, M, Y)
(Anmeldedatum T, M, J)

(Status)
(patentiert, anhängig,
aufgeben)

(Status)
(patented, pending,
abandoned)

Ich erkläre hiermit, dass alle von mir in der vorliegenden Erklärung gemachten Angaben nach meinem besten Wissen und Gewissen der vollen Wahrheit entsprechen, und dass ich diese eidesstattliche Erklärung in Kenntnis dessen abgebe, dass wissentlich und vorsätzlich falsche Angaben gemäss Paragraph 1001, Absatz 18 der Zivilprozessordnung der Vereinigten Staaten von Amerika mit Geldstrafe belegt und/oder Gefängnis bestraft werden koennen, und dass derartig wissentlich und vorsätzlich falsche Angaben die Gültigkeit der vorliegenden Patentanmeldung oder eines darauf erteilten Patentes gefährden können.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

German Language Declaration

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POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith. (list name and registration number)



Customer No. _____

Telefongespräche bitte richten an:
(Name und Telefonnummer)

Direct Telephone Calls to: (name and telephone number)

Ext. _____

Postanschrift:

Send Correspondence to:

Bell, Boyd & Lloyd LLC
Three First National Plaza, 70 West Madison Street, Suite 3300 60602-4207 Chicago, Illinois
Telephone: (001) 312 372 11 21 and Facsimile (001) 312 372 20 98
or
Customer No. _____

Voller Name des einzigen oder ursprünglichen Erfinders: CHRISTIAN RAPPEL		Full name of sole or first inventor: CHRISTIAN RAPPEL	
Unterschrift des Erfinders <i>Christian Rappel</i>	Datum 13.09.01	Inventor's signature	Date
Wohnsitz BERG-BACHHAUSEN, DEUTSCHLAND		Residence BERG-BACHHAUSEN, GERMANY <i>DE</i>	
Staatsangehörigkeit DE		Citizenship DE	
Postanschrift DORFSTRASSE 7B		Post Office Address DORFSTRASSE 7B	
82335 BERG-BACHHAUSEN		82335 BERG-BACHHAUSEN	
Voller Name des zweiten Miterfinders (falls zutreffend):		Full name of second joint inventor, if any:	
Unterschrift des Erfinders	Datum	Second inventor's signature	Date
Wohnsitz		Residence	
Staatsangehörigkeit		Citizenship	
Postanschrift		Post Office Address	

(Bitte entsprechende Informationen und Unterschriften im Falle von dritten und weiteren Miterfindern angeben).

(Supply similar information and signature for third and subsequent joint inventors).